

# Changu with subsequences

Changu likes to play with string and subsequences. He has thought of a puzzle for you. Can you answer him?

He gives you a sequence of '(' and ')'. Your task is to find out the number of its **different subsequences** that are regular bracket sequences.

For example, the sequence “()()” has 3 such subsequences: “()()”, “()”, and “”. As the number can be large, you have to output answer modulus 1000000007.

## Input:

The first line contains T, the number of test cases. T lines follow, each containing a sequence of '(' and ')’.

## Output:

For each test case, print the requires answer.

## Sample Input:

```
2
()
()()
```

## Sample Output:

```
2
3
```

## Constraints:

$T < 10$

$0 < |S| \leq 1000$